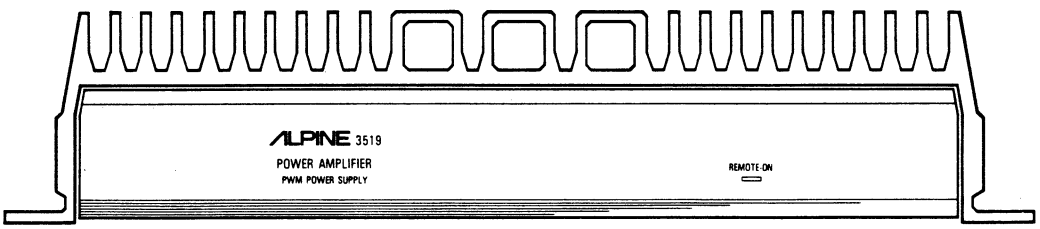
ALPINE SERVICE MANUAL

Power Amplifier



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Specifications

Power Output
- A. Min. RMS. 4 Ohms, 20 Hz to 20 kHz at 0.08% THD ..... 30 W/ch
- B. Min. RMS. 2 Ohms, 20 Hz to 20 kHz at 0.8% THD ..... 25 W/ch

Frequency Response (−1 dB) ..... 10 Hz to 50,000 Hz
Signal to Noise Ratio (IHF A-Weighted) ..... 105 dB
Input Sensitivity/Impedance
- DIN Jack (Fixed) ..... 500 mV/10,000 ohms
- RCA Jack (Variable) ..... 100 to 2,000 mV/10,000 ohms **(AO Model only)**

Speaker Impedance (Ohms) ..... 4 or 2 ohms
Power Requirement ..... 14.4 VDC (11 to 16 V allowable)
Fuse Requirement
- Battery Lead ..... 3 A, 15 A
- Ignition Lead ..... 3 A

Dimensions (WxHxD) ..... 200 mm x 55 mm x 140 mm
Weight: ..... 1.9 kg

1. Removal of Bottom Cover

(1) Remove two screws marked "○" in Figure 4.

2. Removal of Main P.C. Board

(1) Remove ten screws marked "△" in Figure 5 and remove the heat sink.

(2) Pull the Main P.C. board upward.

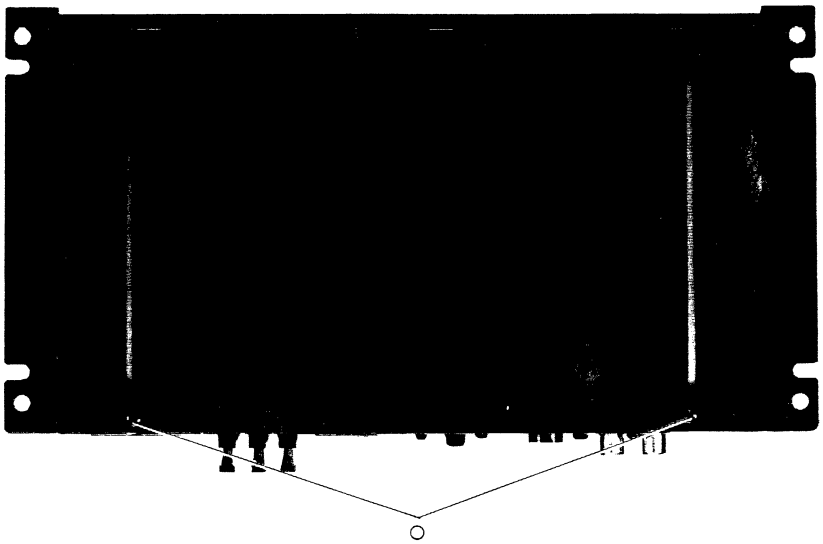


Figure 4

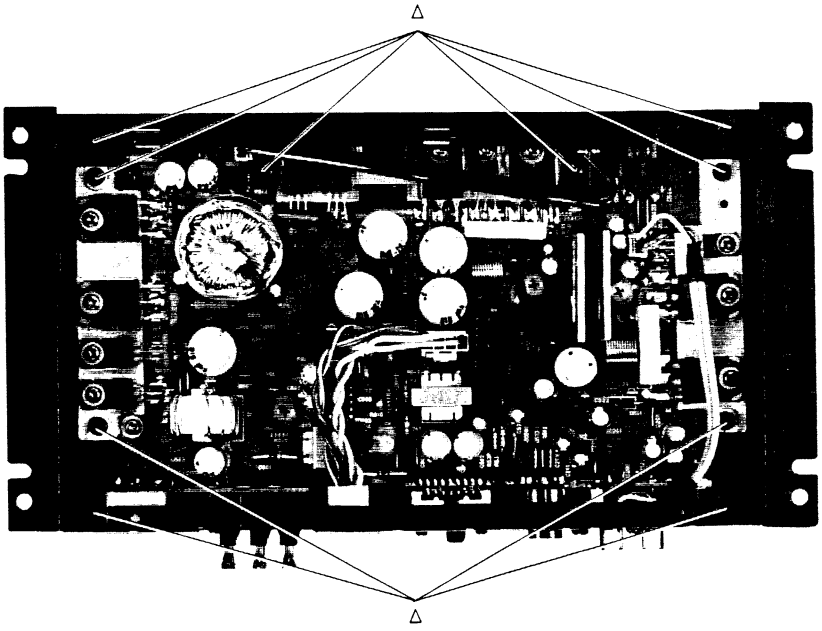


Figure 5

Parts Locations and Disassembly Instructions

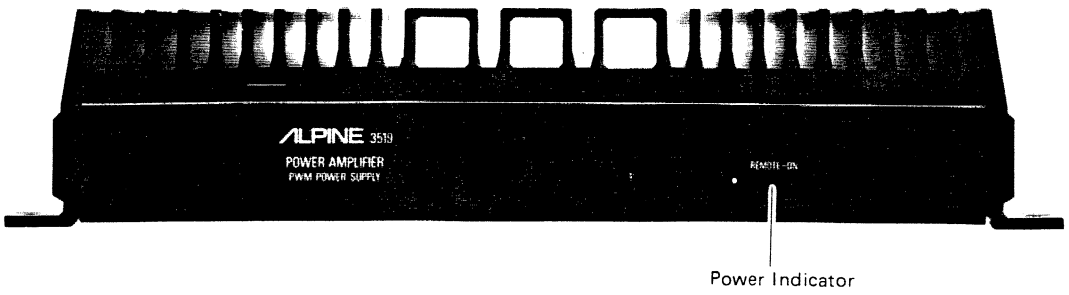


Figure 1

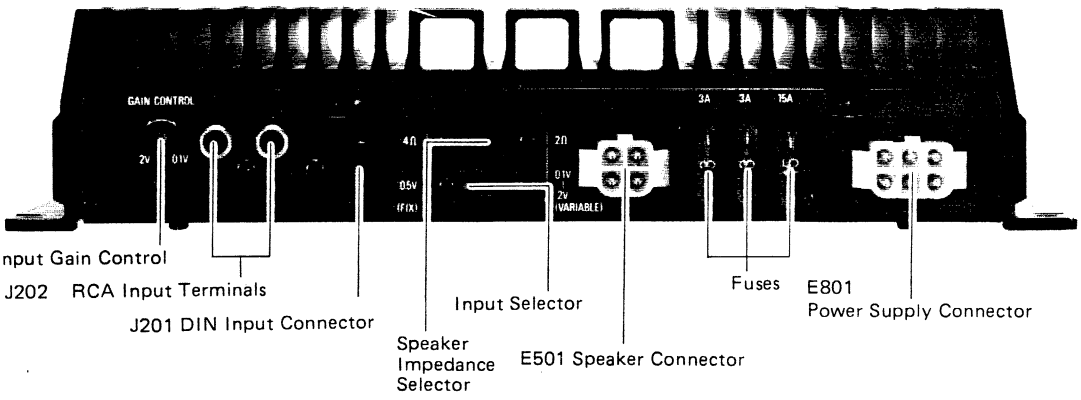


Figure 2

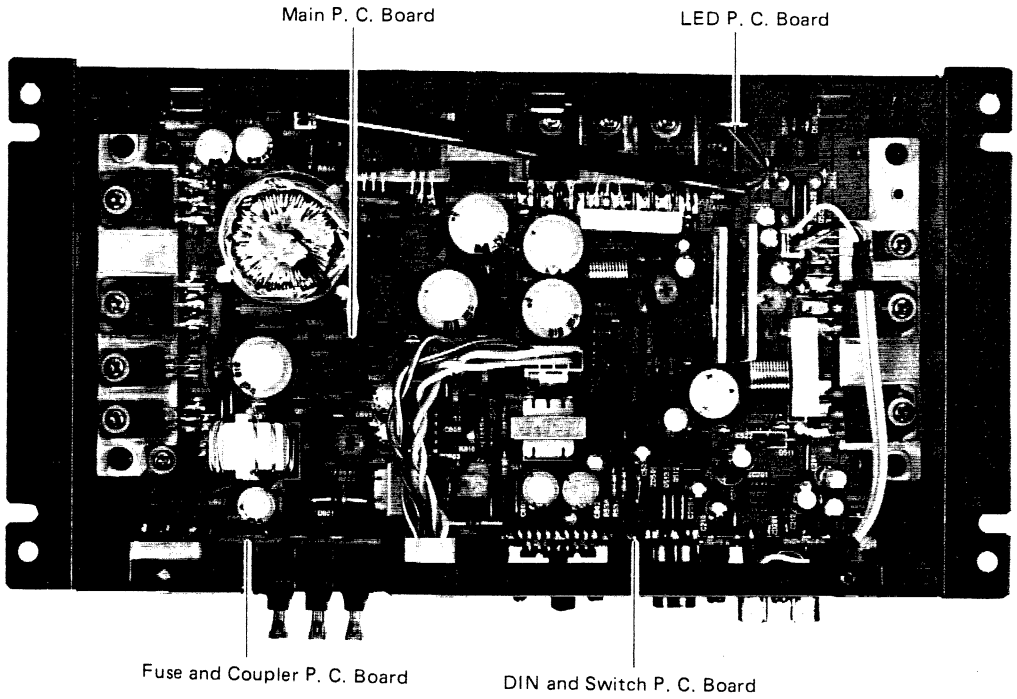
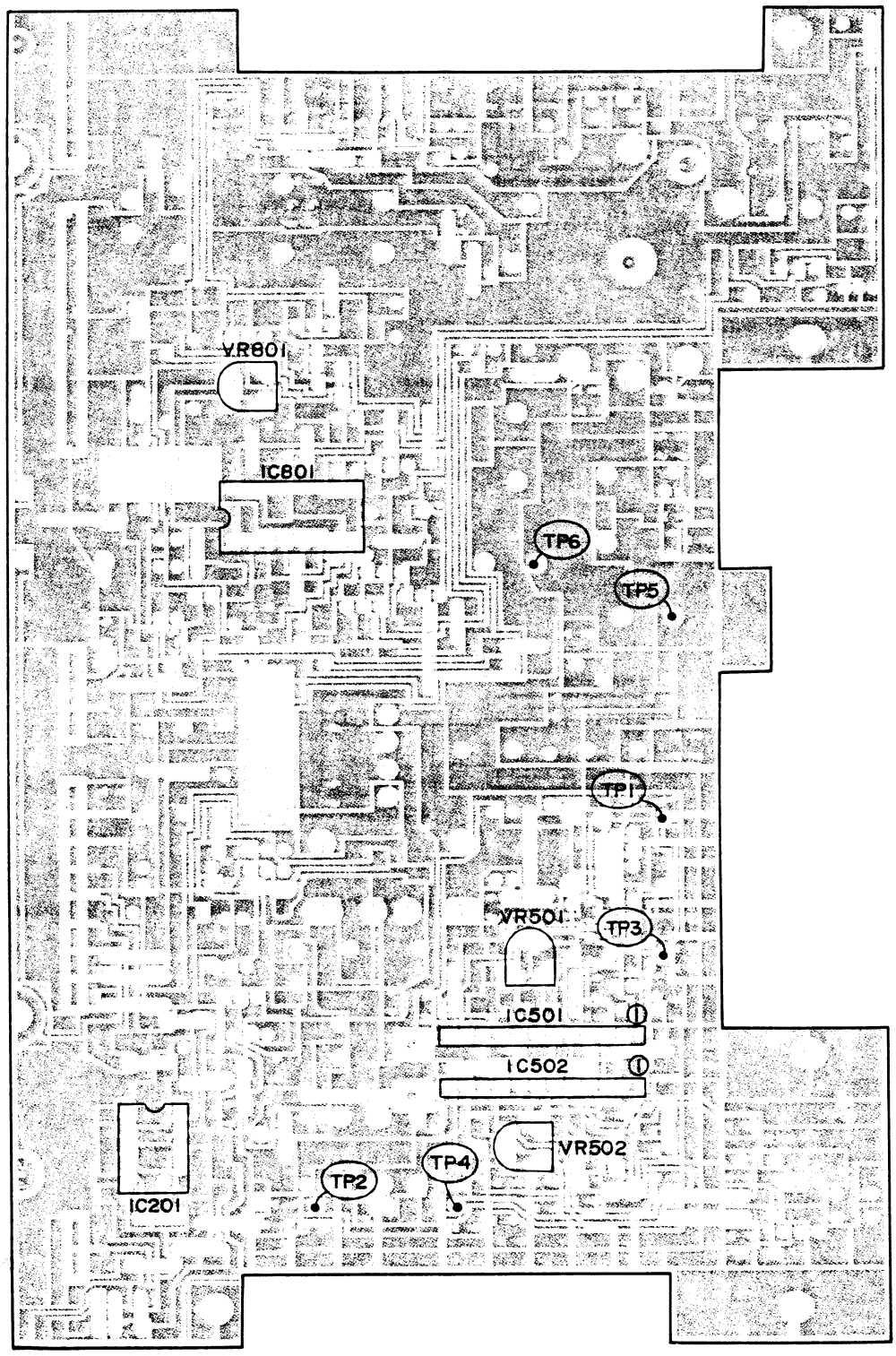


Figure 3

Note □: AO model only

Adjustment Locations



Main P. C. Board (Top View)

Adjustment Procedures

- **Voltage Adjustment**

(1) Connections

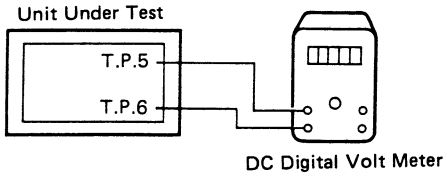


Figure 6

(2) Control Setting
Speaker Impedance Selector . . . . . 4 Ω

(3) Adjustment Procedure
Rotate the solid variable resistor VR801 (T.P. 5, 6) clockwise or counterclockwise to obtain 44 V ±0.5 V on the DC Voltmeter.

- **Idle Current Adjustment**

(1) Connections

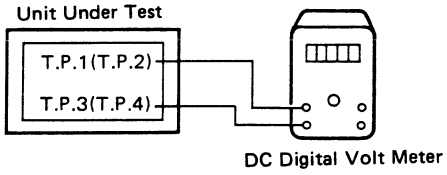


Figure 7

(2) Adjustment Procedure
Rotate the solid variable resistors VR501 (T.P. 1, 3) and VR502 (T.P. 2, 4) clockwise or counterclockwise to obtain 15 V ± 1.5 mV on the DC Voltmeter.

Parts Layout on P.C. Boards

- Main P. C. Board (Top View) (AO model only)

IC801

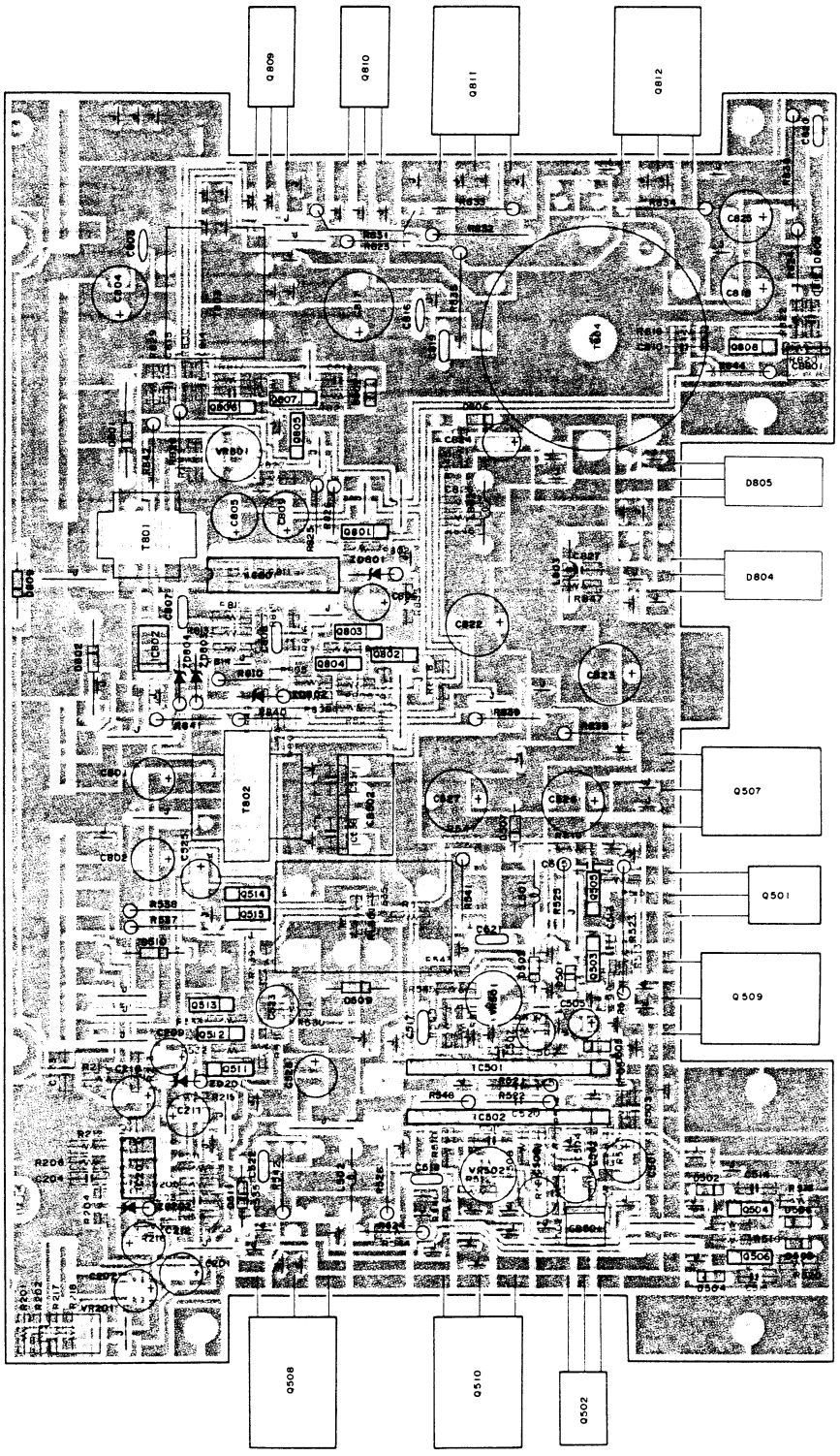
1	2	3	4	5	6	7	8
2.4	2.4	3.0	0	1.7	3.6	0	14.4
9	10	11	12	13	14	15	16
1.2	1.2	14.3	14.3	4.9	4.9	4.9	0

IC201

1	2	3	4	5	6	7	8
0	0	0	−11.9	0	0	0	11.9

IC501, IC502

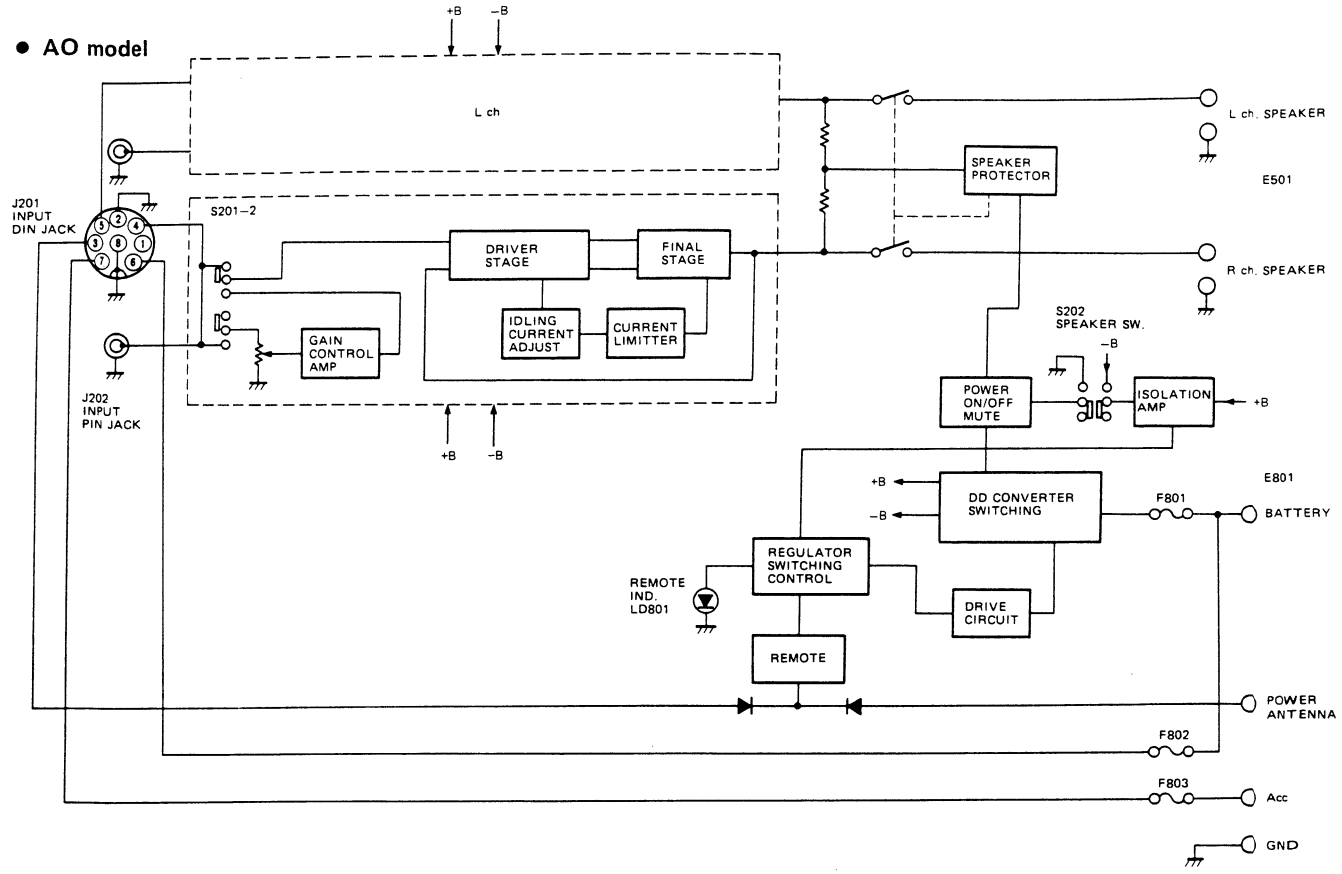
1	2	3	4	5	6	7	8	9	10	11	12
21.3			0	0	−20.3	−1.0	0.4	−22.0	−22.0	−0.6	+0.6



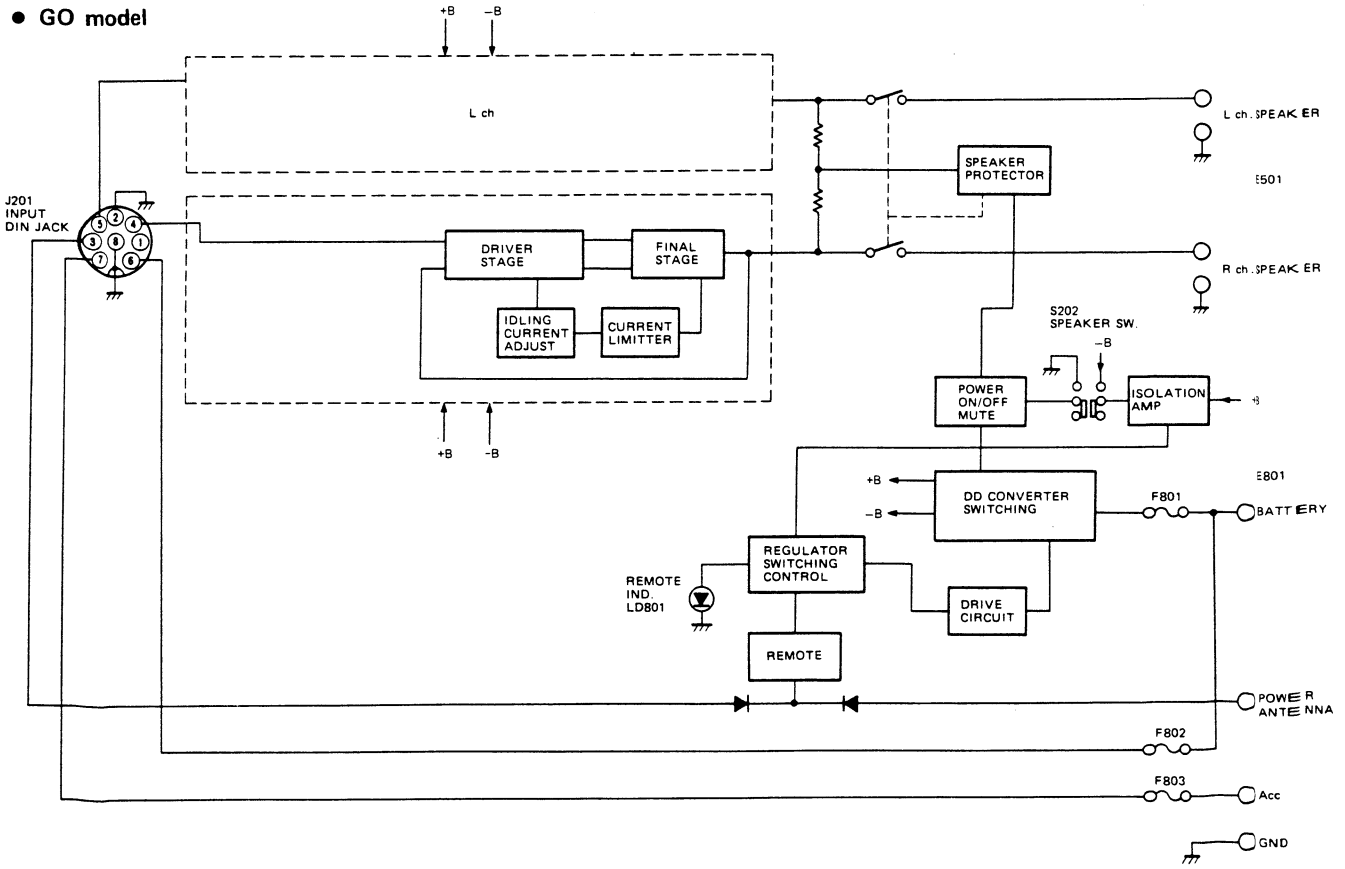
	E	C	B
Q501	−1.1	0.5	−0.5
Q502	−1.1	0.6	−0.5
Q503	0	0.6	0
Q504	0	0.4	0
Q505	0	−0.9	0
Q506	0	−0.9	0
Q507	0	21.7	0.6
Q508	0	21.7	0.6
Q509	0	−22.6	−0.6
Q510	0	−22.6	0.6
Q511	0	8.9	0
Q512	0	8.9	0
Q513	8.9	0	8.9
Q514	0	8.9	−3.8
Q515		8.7	8.9
Q801	14.4	14.4	13.6
Q802	0	0	5.2
Q803	4.9	0	4.9
Q804	0	4.9	0
Q805	0	0.3	0
Q806	0	0.3	0
Q807	14.4	7.2	14.6
Q808	14.4	7.2	14.6
Q809	0.2	14.4	0.3
Q810	0.2	14.4	0.3
Q811	0	14.4	0.1
Q812	0	14.4	0.1

Block Diagram

● AO model



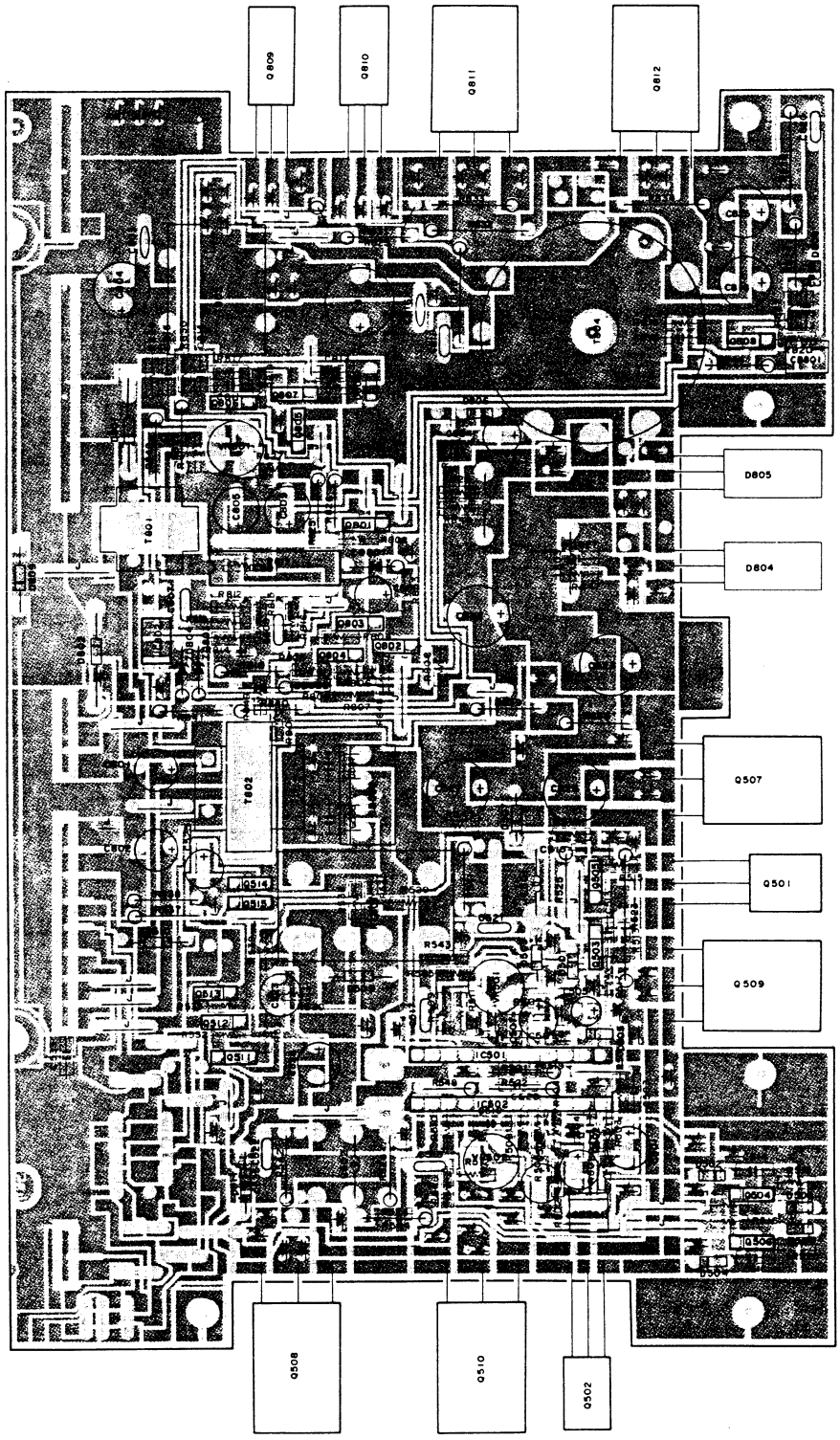
● GO model



- **Main P. C. Board (Top View)** (GO model only)

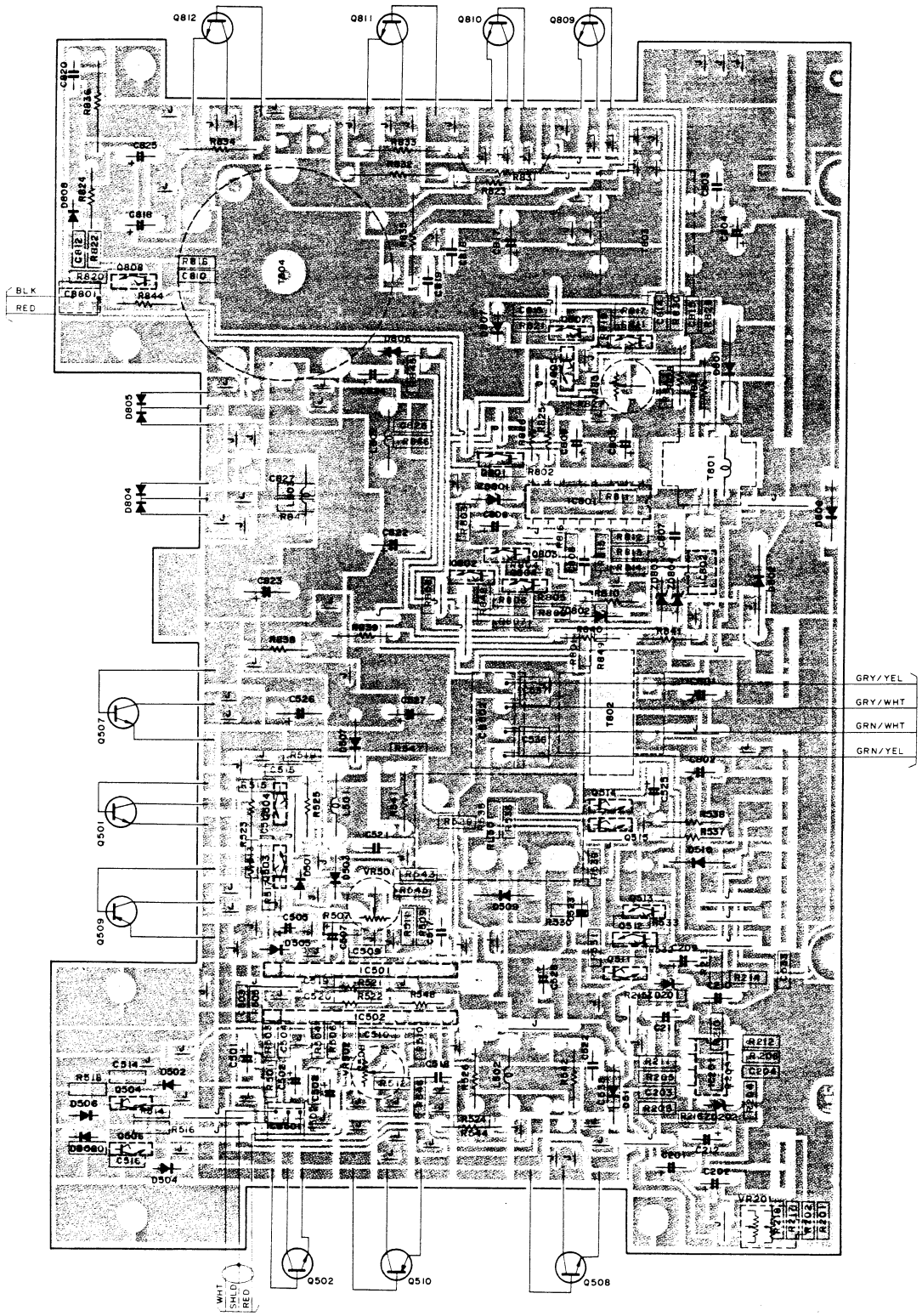
IC801	1	2	3	4	5	6	7	8
	2.4	2.4	3.0	0	1.7	3.6	0	14.4
	9	10	11	12	13	14	15	16
	1.2	1.2	14.3	14.3	4.9	4.9	4.9	0

IC501, IC502	1	2	3	4	5	6	7	8	9	10	11	12
	21.3			0	0	−20.3	−1.0	0.4	−22.0	−22.0	−0.6	+0.6

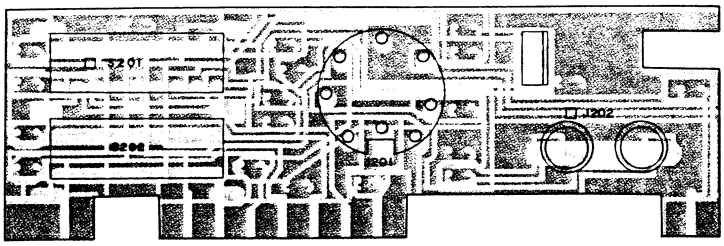


	E	C	B
Q501	−1.1	0.5	−0.5
Q502	−1.1	0.6	−0.5
Q503	0	0.6	0
Q504	0	0.4	0
Q505	0	−0.9	0
Q506	0	−0.9	0
Q507	0	21.7	0.6
Q508	0	21.7	0.6
Q509	0	−22.6	−0.6
Q510	0	−22.6	0.6
Q511	0	8.9	0
Q512	0	8.9	0
Q513	8.9	0	8.9
Q514	0	8.9	−3.8
Q515		8.7	8.9
Q801	14.4	14.4	13.6
Q802	0	0	5.2
Q803	4.9	0	4.9
Q804	0	4.9	0
Q805	0	0.3	0
Q806	0	0.3	0
Q807	14.4	7.2	14.6
Q808	14.4	7.2	14.6
Q809	0.2	14.4	0.3
Q810	0.2	14.4	0.3
Q811	0	14.4	0.1
Q812	0	14.4	0.1

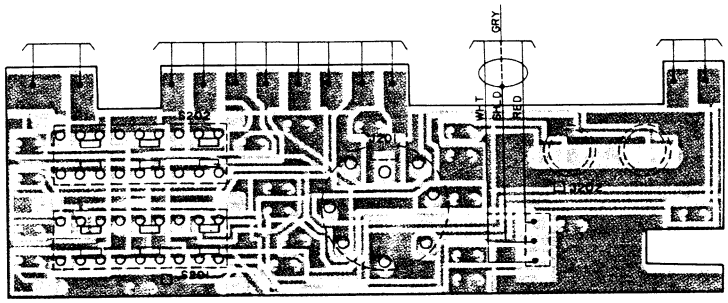
- Main P. C. Board (Bottom View) (AO model only)



- DIN and Switch P. C. Board

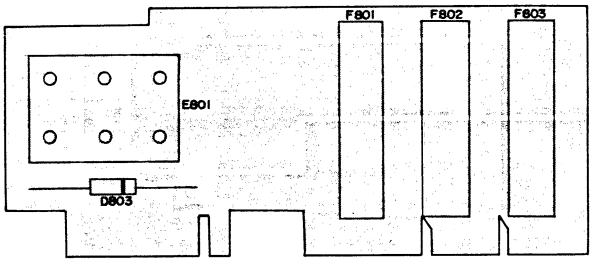


(Top View)

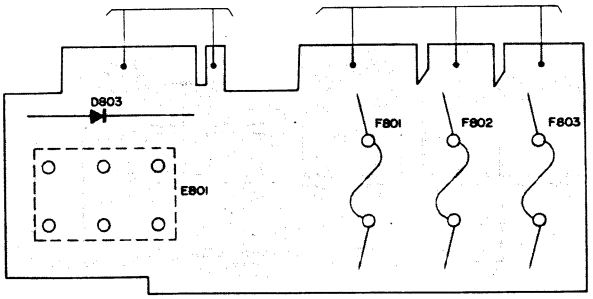


(Bottom View)

- Fuse and Coupler P. C. Board

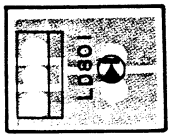


(Top View)

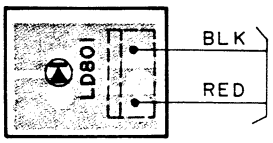


(Bottom View)

- LED P. C. Board



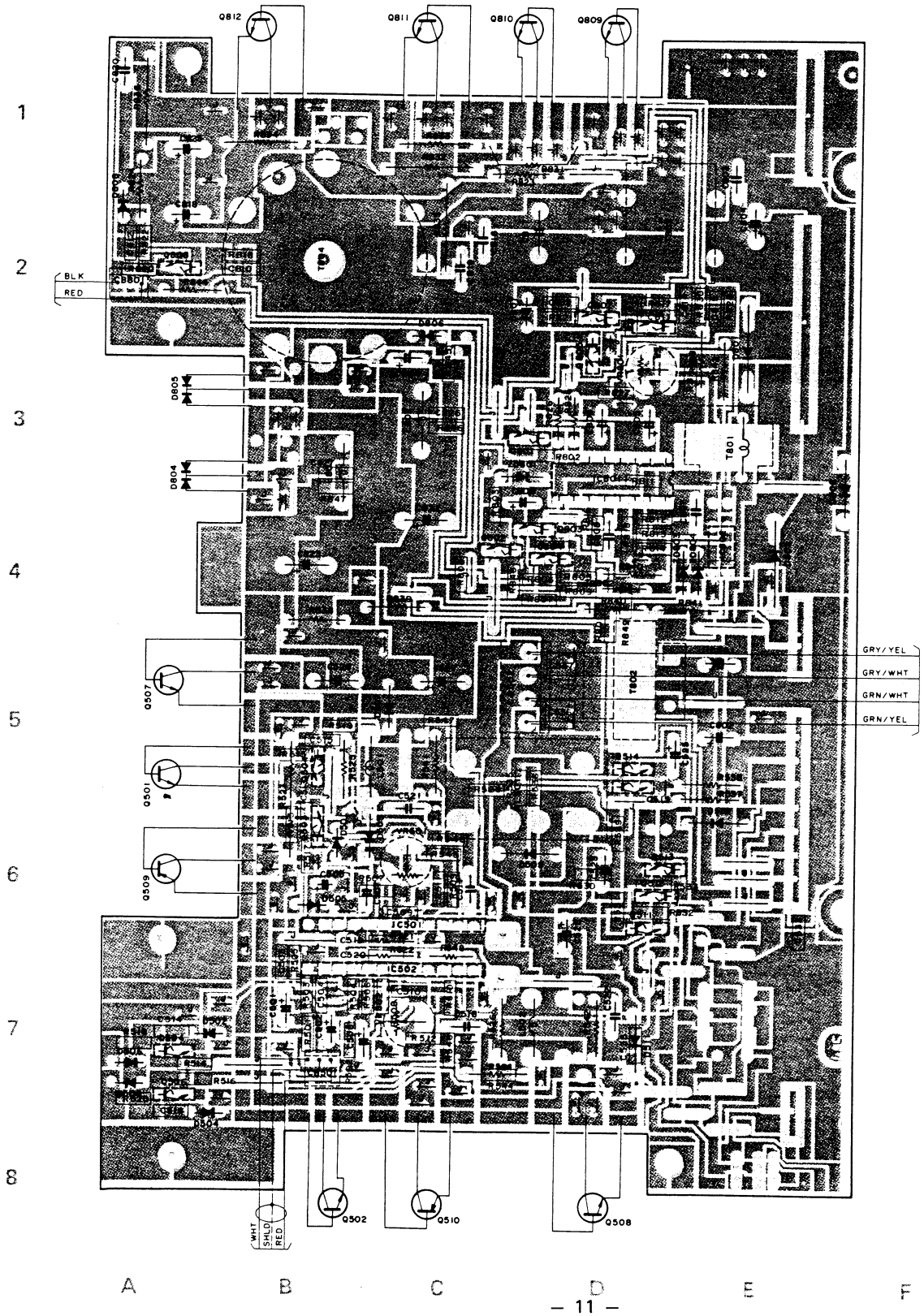
(Top View)



(Bottom View)

NOTE □: AO model only

- Main P. C. Board (Bottom View) (GO model only)



Symbol No.	Part No.	Description
Volume controls		
□ VR201	18B69022F01	10K ohms
VR501	18B44064J01	470 ohms 1/2W
VR502	18B44064J01	470 ohms 1/2W
VR801	18B44064J02	4.7K ohms 1/2W
Relay		
RL501	80T58508F01	G4Z-2282P-12V
Capacitors		
□ C201	23T42478F26	Electrolytic 2.2μF 50V
□ C202	23T42478F26	Electrolytic 2.2μF 50V
□ C203	08S53332F27	CP. 220pF
□ C204	08S53332F27	CP. 220pF
□ C209	23S40657F32	Electrolytic 10μF 50V
□ C210	23S40657F32	Electrolytic 10μF 50V
□ C211	23S40657F21	Electrolytic 100μF 25V
□ C212	23S40657F21	Electrolytic 100μF 25V
C501	23T42478F24	Electrolytic 1.0pF 50V
C502	23T42478F24	Electrolytic 1.0pF 50V
C503	08S53332F27	CP. 220pF
C504	08S53332F27	CP. 220pF
C505	23S41198U12	Electrolytic 10pF 50V
C507	23T65374F05	Electrolytic 100μF 16V
C508	23T65374F05	Electrolytic 100μF 16V
C509	08S53332F17	CP. 33pF
C510	08S53332F17	CP. 33pF
C513	08S53332F51	CP. 0.022μF
C514	08S53332F51	CP. 0.022μF
C515	08S53332F51	CP. 0.022μF
C516	08S53332F51	CP. 0.022μF
C517	08T57705F75	Mylar 0.047μF
C518	08T57705F75	Mylar 0.047μF
C519	08S53332F11	CP. 10pF
C520	08S53332F11	CP. 10pF
C521	08T57705F75	Mylar 0.047μF
C522	08T57705F75	Mylar 0.047μF
C523	23S41192U68	Electrolytic B.P. 100pF 10V
C525	23T65374F01	Electrolytic 100pF 10V

Symbol No.	Part No.	Description
C526	23C42170G38	Electrolytic 2200pF 25V
C527	23C42170G38	Electrolytic 2200pF 25V
C528	23C42170G39	Electrolytic 1000pF 25V
C533	08S53332F51	CP. 0.022μF
C534	08T50579F21	TF 0.47μF
C801	23C42170G30	Electrolytic 470pF 16V
C802	23C42170G30	Electrolytic 470pF 16V
C803	08S40805F22	Ceramic 0.04μF
C804	23T51232F02	Electrolytic 1000pF 16V
C805	23T65374F02	Electrolytic 220pF 10V
C806	23T65374F02	Electrolytic 220pF 10V
C807	08T57705F79	Mylar 0.1μF
C808	08T57705F55	Mylar 1000pF
C809	23T65374F05	Electrolytic 100pF 16V
C810	08S53332F23	CP. 100pF
C811	08S53332F23	CP. 100pF
C812	08S53332F23	CP. 100pF
C813	08S53332F23	CP. 100pF
C814	08S53332F35	CP. 1000pF
C815	08S53332F35	CP. 1000pF
C816	08S40805F22	Ceramic 0.04μF
C817	23C42170G37	Electrolytic 3300pF 16V
C818	23T51232F02	Electrolytic 1000pF 16V
C819	08T57851F05	Mylar 0.022μF
C820	08T57851F05	Mylar 0.022μF
C822	23C42170F38	Electrolytic 2200pF 25V
C823	23C42170G38	Electrolytic 2200pF 25V
C824	23S40657F27	Electrolytic 0.47pF 50V
C825	23T51232F02	Electrolytic 1000pF 16V
C826	08S53332F35	CP. 1000pF
C827	08S53332F35	CP. 1000pF

□: AO model only, Others: common

Electrical Parts List

Carbon resistors of less than 1/4 watts are not entered on the parts list, so please confirm them using the schematic diagram.

Symbol No.	Part No.	Description
ICs		
□ IC201	51T65380F01	BA4558
or	51S43471U02	μPC4558C
IC801	51T71049F01	TL494CN
or	51T70759F01	μPC494C
IC802	51T70760F01	Photo coupler, PS2401-1
Transistors		
Q503	48T51091F01	2SC2021
Q504	48T51091F01	2SC2021
Q505	48T63086F01	2SA937M
Q506	48T63086F01	2SA937M
Q511	48T51091F01	2SC2021
Q512	48T51091F01	2SC2021
Q513	48T63086F01	2SA937M
Q514	48T57337F01	2SD1330
Q515	48T51091F01	2SC2021
Q801	48T69177F01	2SA1358
Q802	48T62540F01	UN1211
Q803	48T63086F01	2SA937M
Q804	48T51091F01	2SC2021
Q805	48T51091F01	2SC2021
Q806	48T51091F01	2SC2021
Q807	48T63086F01	2SA937M
Q808	48T63086F01	2SA937M
Diodes		
D501	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D502	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D503	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D504	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D505	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D506	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D507	48T58583F01	SI .SS176TPA7
or	48T68828F01	1SS133
D508	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D509	48S40477U01	IN4003
D510	48S40477U01	IN4003
D511	48C40235G02	SI 10E2
D801	48T68580F03	SI DSA3A4-F5
D802	48T68580F03	SI DSA3A4-F5
D806	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D807	48T58583F01	SI .SS176TPA7
or	48T68828F01	IS133
D808	48T58583F01	SI .SS176TPA7
or	48T68828F01	ISS133
D809	48S40477U01	IN4003
or	48T68828F01	ISS133
□ ZD201	48T68697F46	Zener, HZS 12EB2
□ or	48T68697F46	Zener, MTZ 12-B
□ ZD202	48T68697F46	Zener, HZS 12EB2
□ or	48T68699F38	Zener, MTZ 12-B
ZD801	48T68697F24	Zener, HZS6.2EB2
or	48T68699F16	Zener, MTZ 6.2-B
ZD802	48T68697F57	Zener, HZS 18EB1
or	48T68699F49	Zener, MTZ 18-A
ZD803	48T68697F66	Zener, HZS 22EB3
or	48T68699F59	Zener, MTZ 22-D
ZD804	48T68697F40	Zener, HZS 10EB3
or	48T68699F33	Zener, MTZ 10-D
Thermistors		
TH802	48T60670F01	20K ohms
Coils		
L501	24T67516F01	Choke, 1.1μH
L502	24T67516F01	Choke, 1.1μH
L802	25T58607F01	Choke, 4A
L803	25T58607F01	Choke 4A
T801	25T47510F01	Choke, Filter, (EI-14)
T802	25T71689F01	Choke, Filter, (EI-19)
or	25C40894G11	Transformer
T803	25T70755F01	Choke,Common 3519

□: AO model only, Others: common

Symbol No.	Part No.	Description
	Miscellaneous	
ICs		
IC501	51T58602F01	µPC 1225H
IC502	51T58602F01	µPC 1225H
Transistors		
Q501	48T64376F01	2SC3423
Q502	48T64376F01	2SC3423
Q507	48T57132F03	2SC3181
Q508	48T57132F03	2SC3181
Q509	48T57131F03	2SA1264
Q510	48T57131F03	2SA1264
Q809	48T40469U01	2SC1983
Q810	48T40469U01	2SC1983
Q811	48T47613F01	2SD1065
Q812	48T47613F01	2SD1065
Diodes		
D803	48T68079F03	30D4 FA
D804	48T71360F01	C10P20F
or	48T61597F01	CTG22S
D805	48T71360F02	C10P20FR
or	48T61597F02	CTG22R
LED		
LD801	48T52238F02	PR5552K (Red)
Switches		
□S201	40T70757F01	Slide
S202	40T70757F01	Slide
Transformer		
T804	25T70754F01	DC-DC Control
etc.		
E501	01T70747F01	Assy., Coupler 4-pins
E801	01T70748F01	Assy., Coupler 6-pins
F801	65T58596F05	Fuse, Auto 15A
F802	65T58596F01	Fuse, Auto 3A
F803	65T58596F01	Fuse, Auto 3A
J201	09T70752F01	Socket, Din 8-pins
□J202	09T70753F01	Jack, Rca 2-pins
TH801	48T60670T01	Thermister, 20K

□: AO model only, Others: common

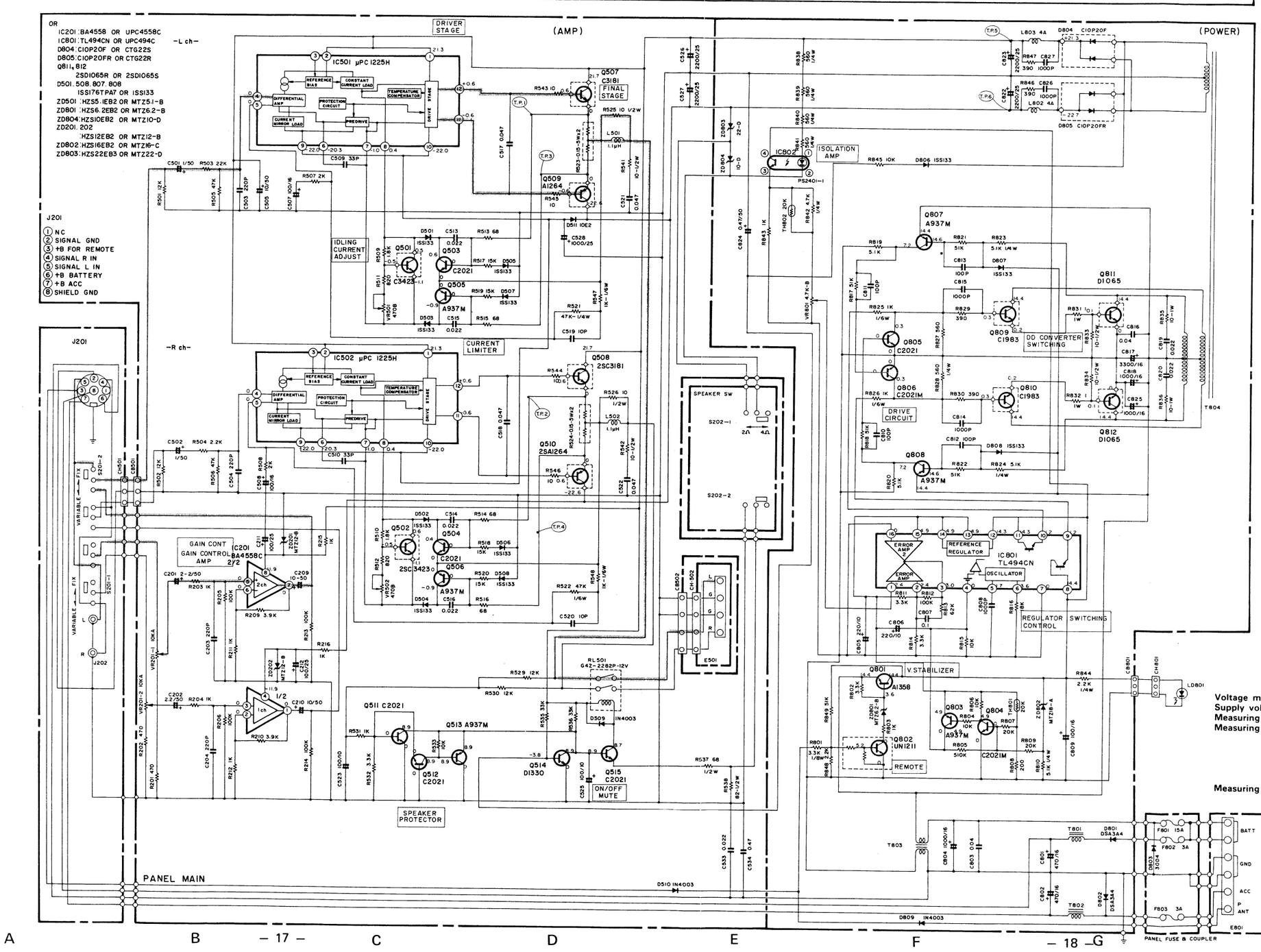
Symbol No.	Part No.	Description
Resistors		
□R201	06S53330F45	CP. 470 ohms 1/8W
□R202	06S53330F45	CP. 470 ohms 1/8W
□R203	06S53330F53	CP. 1K ohms 1/8W
□R204	06S53330F53	CP. 1K ohms 1/8W
□R205	06S53331F02	CP. 100K ohms 1/8W
□R206	06S53331F02	CP. 100K ohms 1/8W
□R209	06S53330F67	CP. 3.9K ohms 1/8W
□R210	06S53330F67	CP. 3.9K ohms 1/8W
□R211	06S53330F53	CP. 1K ohms 1/8W
□R212	06S53330F53	CP. 1K ohms 1/8W
□R213	06S53331F02	CP. 100K ohms 1/8W
□R214	06S53331F02	CP. 100K ohms 1/8W
□R215	06S53330F53	CP. 1K ohms 1/8W
□R216	06S53330F53	CP. 1K ohms 1/8W
R501	06S53330F79	CP. 12K ohms 1/8W
R502	06S53330F79	CP. 12K ohms 1/8W
R503	06S53330F61	CP. 2.2K ohms 1/8W
R504	06S53330F61	CP. 2.2K ohms 1/8W
R505	06S53330F93	CP. 47K ohms 1/8W
R506	06S53330F93	CP. 47K ohms 1/8W
R507	06S53330F60	CP. 2K ohms 1/8W
R508	06S53330F60	CP. 2K ohms 1/8W
R509	06S53330F59	CP. 1.8K ohms 1/8W
R510	06S53330F59	CP. 1.8K ohms 1/8W
R511	06S53330F51	CP. 820 ohms 1/8W
R512	06S53330F51	CP. 820 ohms 1/8W
R513	06S53330F25	CP. 68 ohms 1/8W
R514	06S53330F25	CP. 68 ohms 1/8W
R515	06S53330F25	CP. 68 ohms 1/8W
R516	06S53330F25	CP. 68 ohms 1/8W
R517	06S53330F81	CP. 15K ohms 1/8W
R518	06S53330F81	CP. 15K ohms 1/8W
R519	06S53330F81	CP. 15K ohms 1/8W
R520	06S53330F81	CP. 15K ohms 1/8W
R523	06T51107F04	RW. 0.15 ohms 5W
R524	06T51107F04	RW. 0.15 ohms 5W
R525	06T67581F08	C.F. 10 ohms 1/2W
R526	06T67581F08	C.F. 10 ohms 1/2W
R529	06S53330F79	CP. 12K ohms 1/8W
R530	06S53330F79	CP. 12K ohms 1/8W
R531	06S53330F53	CP. 1K ohms 1/8W
R532	06S53330F65	CP. 3.3K ohms 1/8W
R533	06S53330F77	CP. 10K ohms 1/8W
R535	06S53330F89	CP. 33K ohms 1/8W
R536	06S53330F89	CP. 33K ohms 1/8W
R537	06T67581F18	C.F. 68 ohms 1/2W
R538	06T67581F19	C.F. 82 ohms 1/2W
R541	06T67581F08	C.F. 10 ohms 1/2W
R542	06T67581F08	C.F. 10 ohms 1/2W
R543	06S53330F05	CP. 10 ohms 1/8W
R544	06S53330F05	CP. 10 ohms 1/8W
R545	06S53330F05	CP. 10 ohms 1/8W
R546	06S53330F05	CP. 10 ohms 1/8W
R801	06S53330F65	CP. 3.3K ohms 1/8W
R802	06S53330F65	CP. 3.3K ohms 1/8W
R803	06S53330F53	CP. 1K ohms 1/8W
R804	06S53330F77	CP. 10K ohms 1/8W
R805	06S53331F19	CP. 510K ohms 1/8W
R806	06S53330F77	CP. 10K ohms 1/8W
R807	06S53330F84	CP. 20K ohms 1/8W
R808	06S53330F36	CP. 200 ohms 1/8W
R809	06S53330F84	CP. 20K ohms 1/8W
R811	06S53330F65	CP. 3.3K ohms 1/8W
R812	06S53331F02	CP. 100K ohms 1/8W
R813	06S53330F96	CP. 62K ohms 1/8W
R814	06S53330F65	CP. 3.3K ohms 1/8W
R815	06S53330F77	CP. 10K ohms 1/8W
R816	06S53330F83	CP. 18K ohms 1/8W
R817	06S53330F94	CP. 51K ohms 1/8W
R818	06S53330F94	CP. 51K ohms 1/8W
R819	06S53330F70	CP. 5.1K ohms 1/8W
R820	06S53330F70	CP. 5.1K ohms 1/8W
R821	06S53330F94	CP. 51K ohms 1/8W
R822	06S53330F94	CP. 51K ohms 1/8W
R827	06S53330F47	CP. 560 ohms 1/8W
R829	06S53330F43	CP. 390 ohms 1/8W
R830	06S53330F43	CP. 390 ohms 1/8W
R831	06T55178F07	MF 1.0 ohm 1W
R832	06T55178F07	MF 1.0 ohm 1W
R833	06T55175F17	MF 10 ohms 1/2W
R834	06T55175F17	MF 10 ohms 1/2W
R835	06T55177F17	MF 10 ohms 1W
R836	06T55177F17	MF 10 ohms 1W
R843	06S53330F53	CP. 1K ohms 1/8W
R845	06S53330F77	CP. 10K ohms 1/8W
R846	06S53330F43	CP. 390 ohms 1/8W
R847	06S53330F43	CP. 390 ohms 1/8W
R848	06S53330F61	CP. 2.2K ohms 1/8W
R849	06S53330F94	CP. 51K ohms 1/8W

□: AO model only, Others: common

Schematic Diagram

(AO model only)

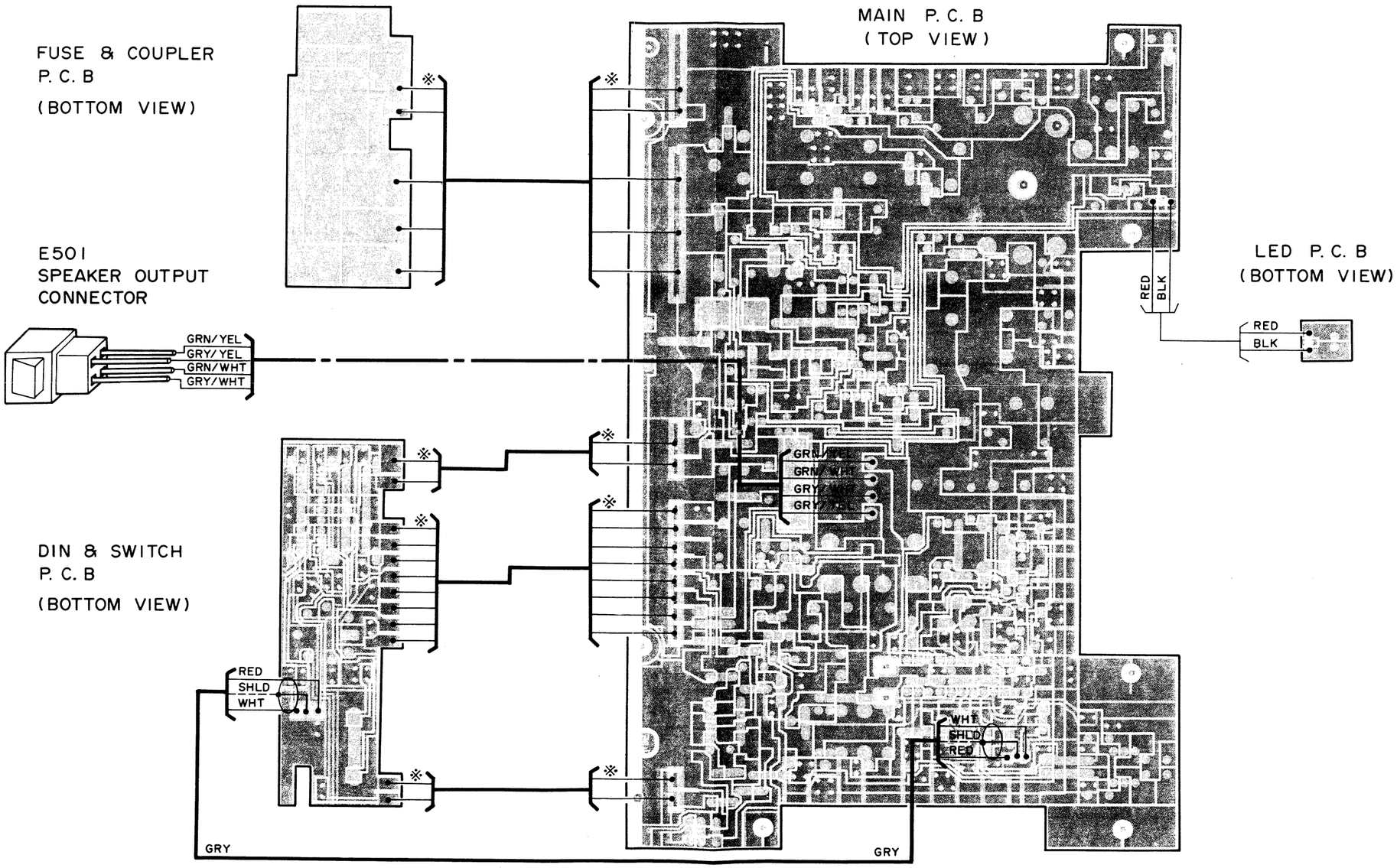
ICs	IC201 IC501 IC502 IC802 IC801
Transistors	Q501–Q506 Q507–Q510 Q805–Q808 Q809–Q812 Q511 Q512 Q513 Q514 Q515 Q801–Q804
Diodes	ZD201 D501 D503 D505 D507 D511 ZD803 ZD804 D806 D807 D808 D804 D805 ZD202 D502 D504 D506 D508 D509 D510 ZD801 D809 ZD802 D801–D803 LD801



Voltage measuring conditions

Supply voltage	14.4V DC
Measuring instrument	Digital Multimeter
Measuring standard	With respect to the primary ground potential (POWER) With respect to the secondary ground potential (AMPLIFIER)
Measuring conditions	No signal input

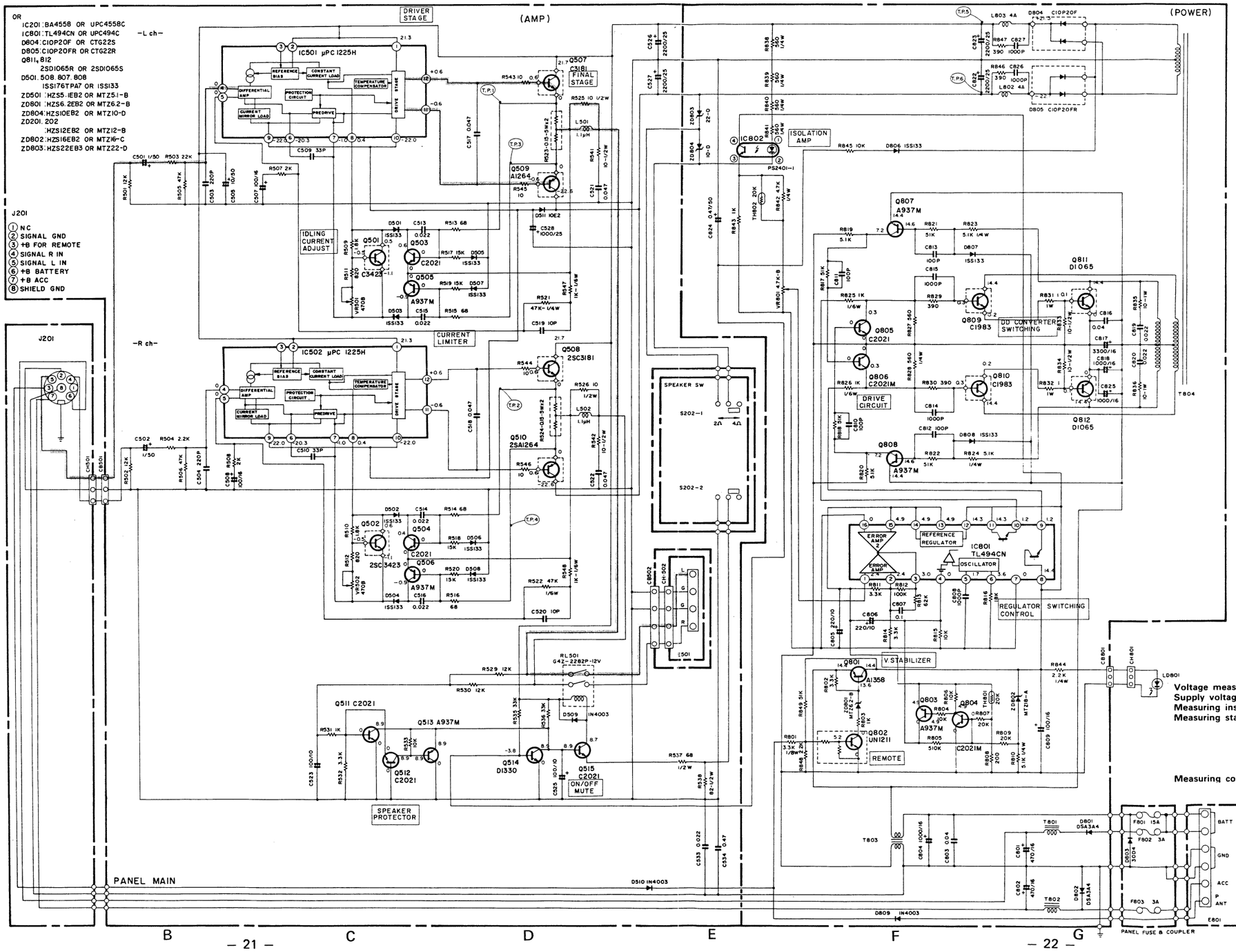
Wiring Diagram



Schematic Diagram

(G0 model only)

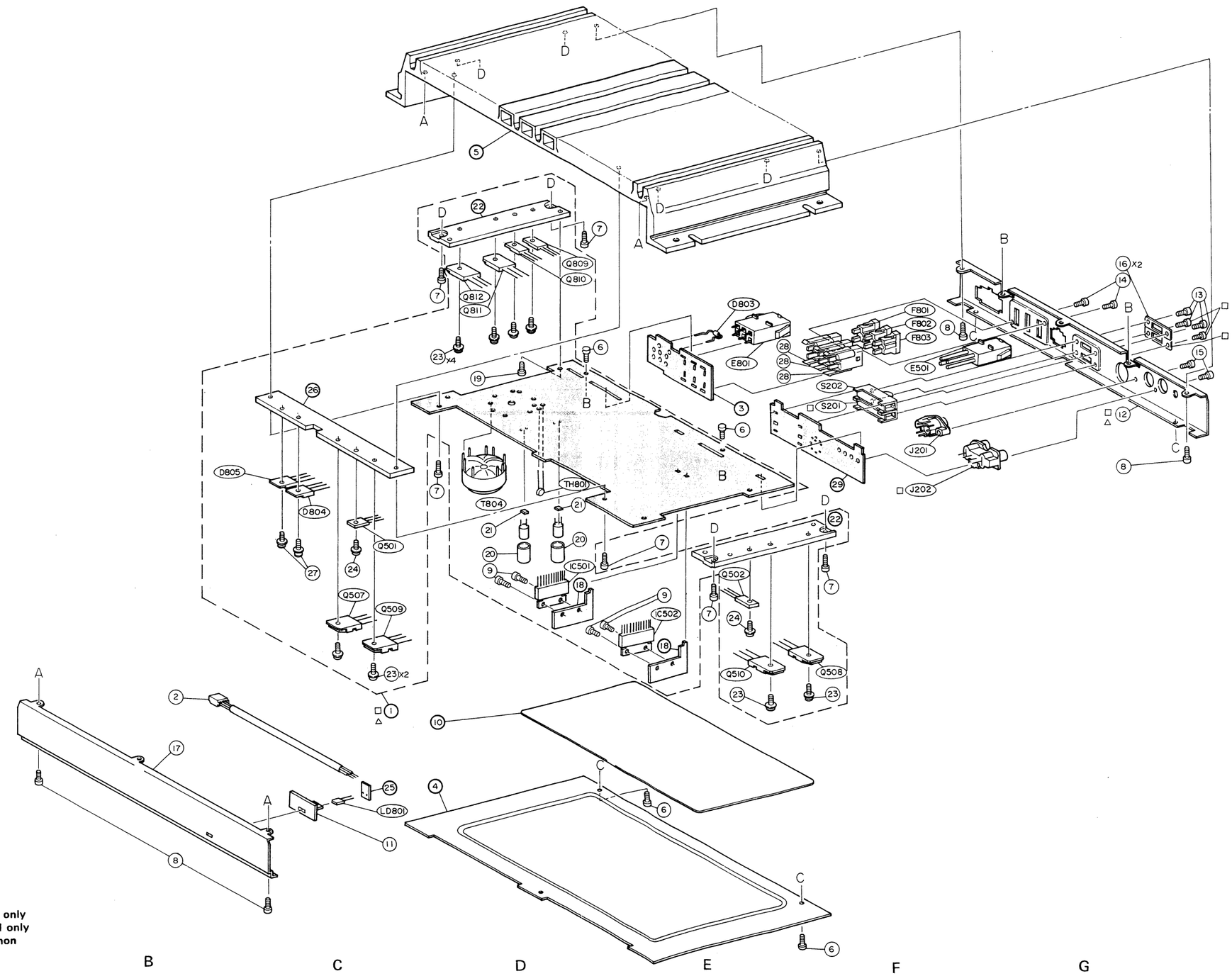
ICs	IC201 IC501 IC502 IC802 IC801
Transistors	Q501–Q506 Q507–Q510 Q805–Q808 Q809–Q812 Q511 Q512 Q513 Q514 Q515 Q801–Q804
Diodes	ZD201 D501 D503 D505 D507 D511 ZD803 ZD804 D806 D807 D808 D804 D805 ZD202 D502 D504 D506 D508 D509 D510 ZD801 D809 ZD802 D801–D803 LD801



Voltage measuring conditions

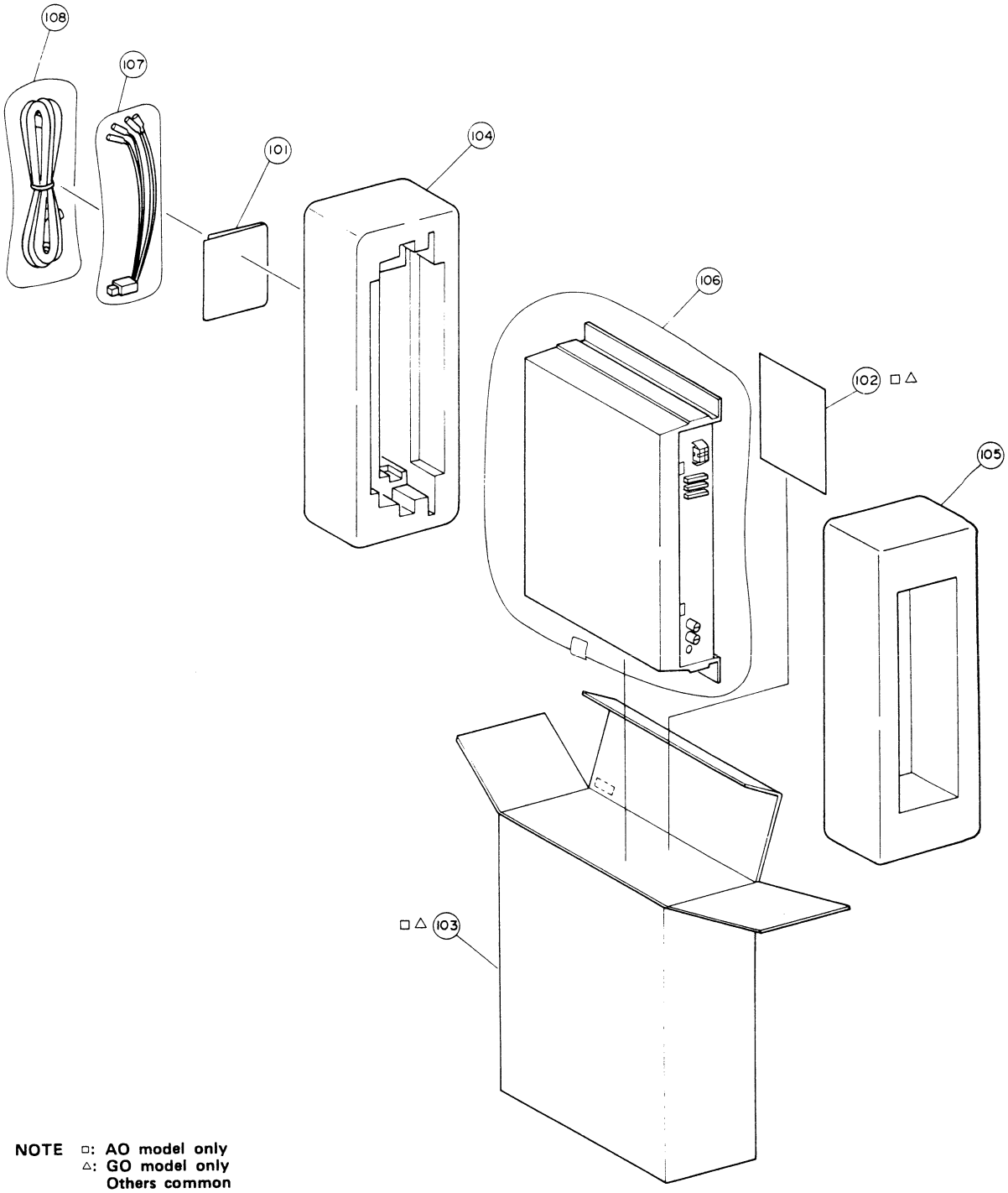
Supply voltage	14.4V DC
Measuring instrument	Digital Multimeter
Measuring standard	With respect to the primary ground potential (POWER) With respect to the secondary ground potential (AMPLIFIER)
Measuring conditions	No signal input

Exploded View (General)



Note □: AO model only
△: GO model only
Others: common

Packing Method View



NOTE □: AO model only
△: GO model only
Others common

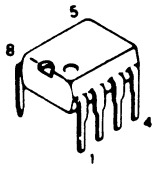
Mechanical Parts List

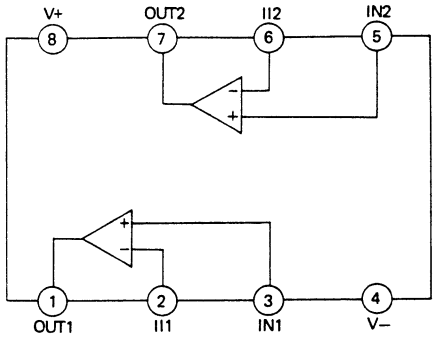
Symbol No.	Index	Part No.	Description
□1	5C	*	Assy., Main Board
△1	5C	*	Assy., Main Board
2	5B	01D61220F26	Assy., Connector 3-pins
3	3E	*	Fuse and Coupler P.C.B.
4	6D	*	Cover, Bottom
5	2D	*	Heatsink
6		03S44205G04	Screw, Pan (M3 x 5)
7		03S63857F39	Screw, Tapping (M3 X12)
8		03S63857F36	Screw, Tappinpg (M3 x 6)
9		03S71031F08	Screw, Bind (M3 x 5)
10		*	Insulator, Cover
11	6C	15B70599F01	Cover LED 3519
□12	3G	27C70598F01	Chassis, Rear
△12	3G	27C70598F02	Chassis, Rear
13		03S43997P51	Screw, Rnd (M2.6 x 4)
14		03S68555F02	Screw, Pan (M2.5 x 5.5)
15		03S40012G41	Screw, Tapping (M3 x 8)
16	3G	14A70605F01	Insulator, Switch Lock
17	5B	27C70597F01	Chassis, Front
18	5E	*	Heatsink, IC 501,502
19		03S71031F07	Screw, Bind (M3 x 6)
20	5D	26A72624F01	Shield, Case
21	4D	75S72374F06	Cushion, Rubber
22	3D	*	Heatsink, Transistor
23		03S71252F05	Screw, Pan (M3 x 10)
24		03S71252F04	Screw, Pan (M3 x 9)
25	6C	*	LED P.C.B.
26	4C	*	Heatsink
27		03S71252F03	Screw, Pan (M3 x 8)
or		03S71252F05	Screw, Pan (M3 x 10)
28	3F	F9T70751F01	Holder, Auto Fuse 1-pin
29	4F	*	DIN Switch P.C.B.

NOTE □: **AO model only**
△: **GO model only**
Others common

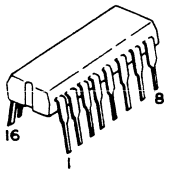
Semiconductors Leads Identifications

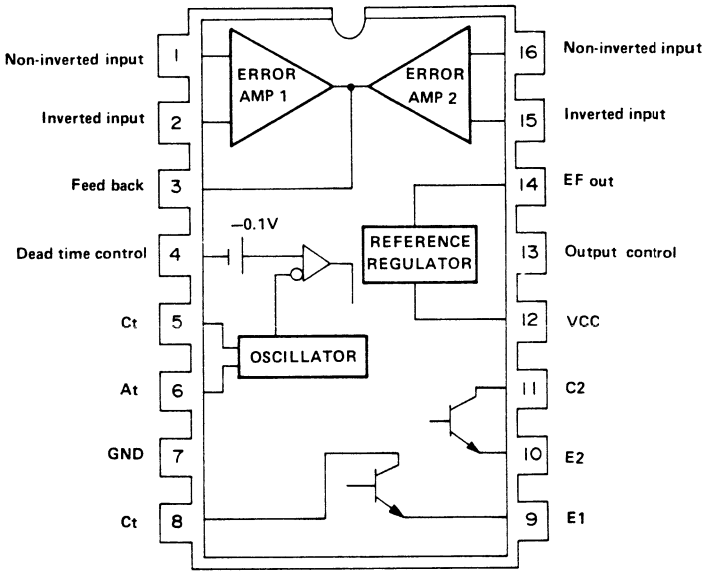
BA4558
μPC4558 IC201 (AO model only)



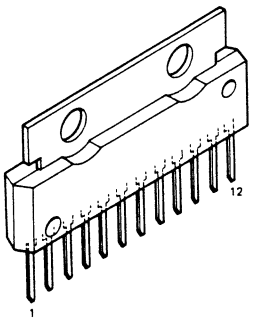


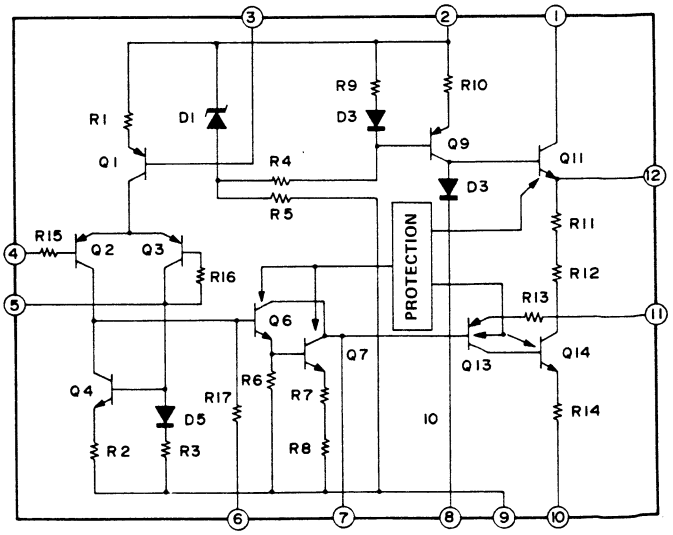
μPC494C IC801





μPC1225H IC501, IC502



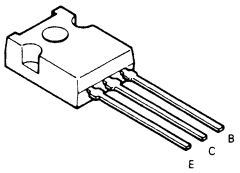


Packing Parts List

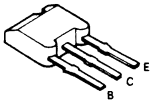
Symbol No.	Part No.	Description
		Packing Assembly Parts
101	01V71300F09	Assy, Kit Installation 3519
□ 102	01V71300F10	Assy, Pamphlet
□ 102	68P73333F20	Owner's Manual
103	56S69254F14	Carton, Packing Individual Std
103	56S69254F17	Carton, Packing
104	56D70744F01	Tray, Packing "Front"
105	56D70744F02	Tray, Packing "Rear"
106	56B72811F01	Sack, Polyethylene
107	01T70749F01	Assy, Kit Wire 4-pins
108	01T70750F01	Assy, Kit Wire 6-pins
Label		
	54S60911F91	Composite (Cover Bottom)
	54B42124G01	Serial No. (Cover Bottom, Carton Ind)

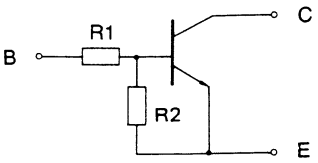
NOTE □: **AO model only**
△: **GO model only**
Others: common

2SA1358 Q801

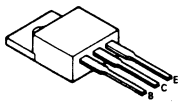


UN1211(48T62540F01) Q802

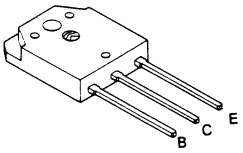




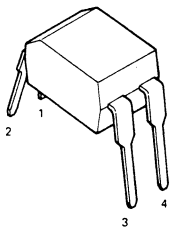
2SC1983 Q809, Q810

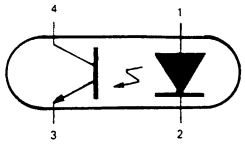


2SD1065 Q811, Q812

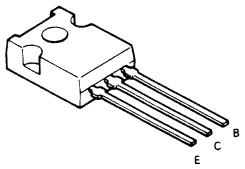


PS2401 IC802

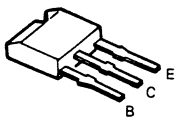




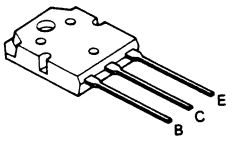
2SC3423 Q501, Q502



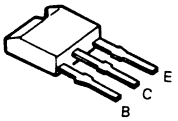
2SC2021 Q503, Q504, Q511, Q512, Q515, Q804
Q805, Q806
2SA937 Q505, Q506, Q513, Q803, Q807, Q808



2SC3181 Q507, Q508,
2SA1264 Q509, Q510



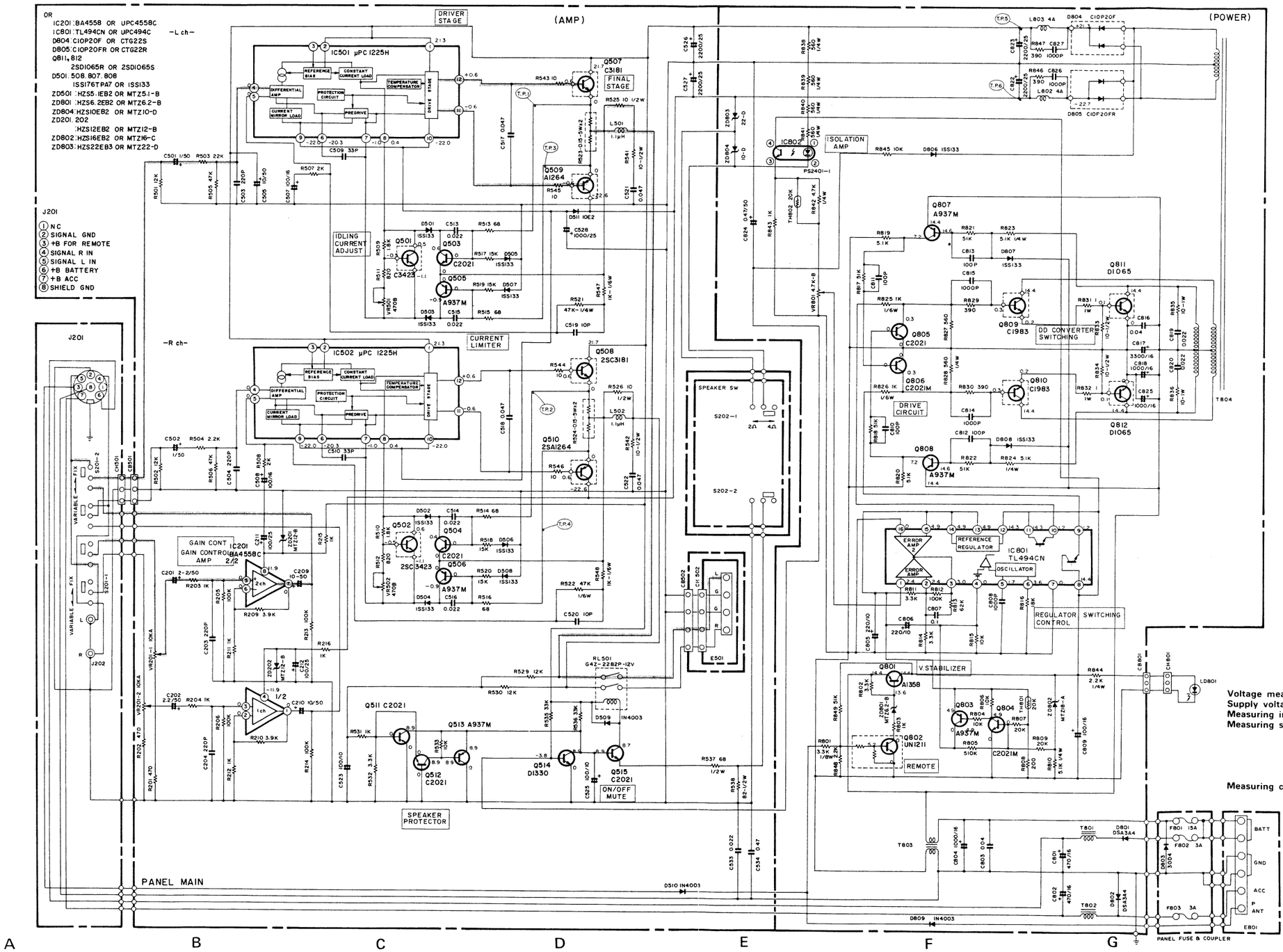
2SD1330 Q514



Schematic Diagram

(AO model only)

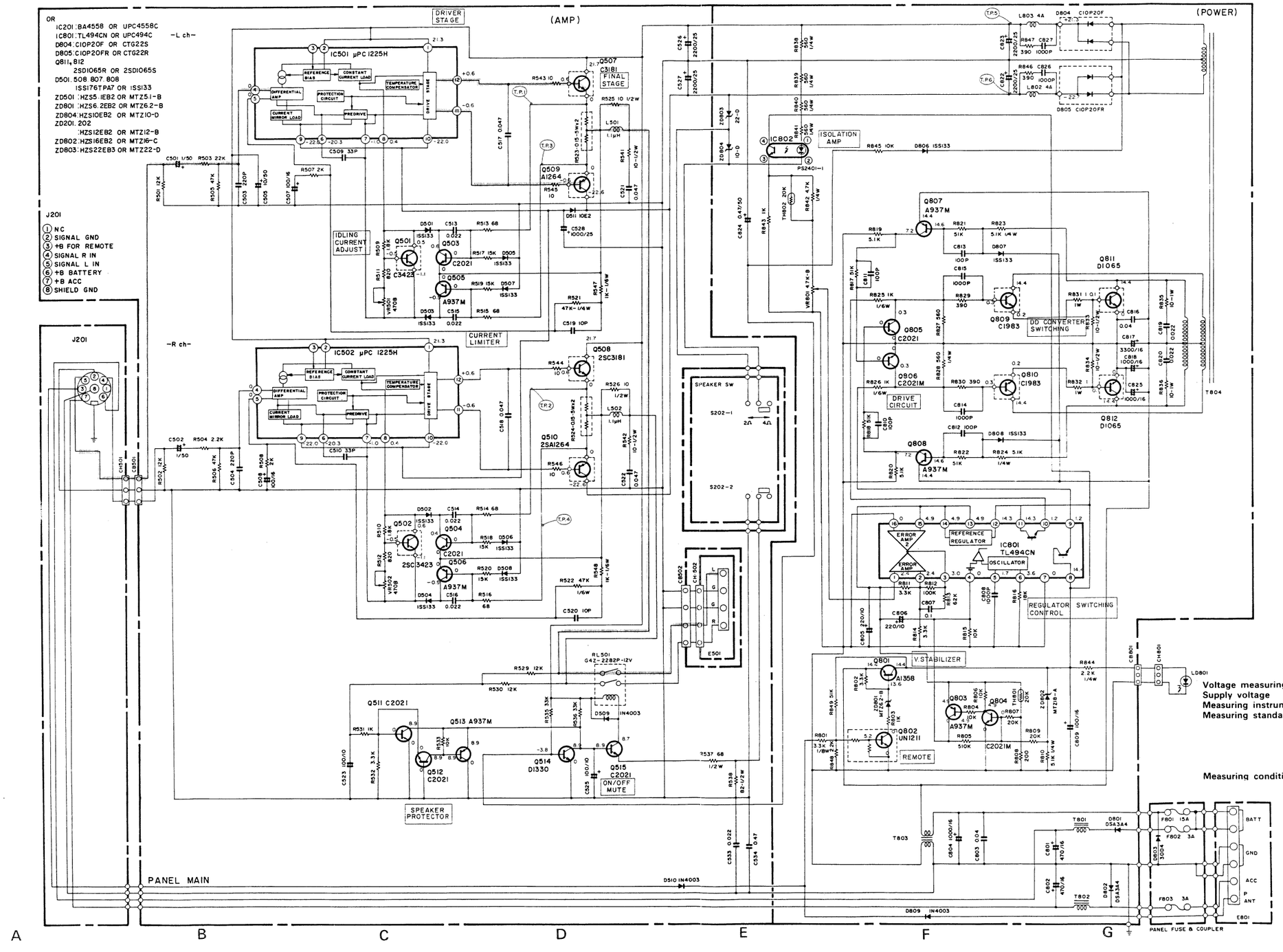
ICs	IC201 IC501 IC502 IC802 IC801
Transistors	Q501–Q506 Q507–Q510 Q805–Q808 Q809–Q812 Q511 Q512 Q513 Q514 Q515 Q801–Q804
Diodes	ZD201 D501 D503 D505 D507 D511 ZD803 ZD804 D806 D807 D808 D804 D805 ZD202 D502 D504 D506 D508 D509 D510 ZD801 D809 ZD802 D801–D803 LD801



Schematic Diagram

(GO model only)

ICs	IC201 IC501 IC502 IC802 IC801
Transistors	Q501–Q506 Q507–Q510 Q805–Q808 Q809–Q812 Q511 Q512 Q513 Q514 Q515 Q801–Q804
Diodes	ZD201 D501 D503 D505 D507 D511 ZD803 ZD804 D806 D807 D808 D804 D805 ZD202 D502 D504 D506 D508 D509 D510 ZD801 D809 ZD802 D801–D803 LD801



Voltage measuring conditions

Supply voltage	14.4V DC
Measuring instrument	Digital Multimeter
Measuring standard	With respect to the primary ground potential (POWER) With respect to the secondary ground potential (AMPLIFIER)
Measuring conditions	No signal input

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